OCEAN GALES AND STORMS, AUGUST 1941

Vessel	Position at time of lowest barometer Latitude Longitude		Gale began, August	Time of lowest barometer, August	Gale ended, August	Lowest ba- rometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
NORTH ATLANTIC OCEAN A vessel Do. Do.	37 48 N. 13 00 N. 37 12 N.	62 36 W. 81 24 W. 73 48 W.	10 10 12	2a, 11	10 12 12	Millibars 1, 008. 5 1, 008. 1 1, 006. 8	SSW ESW	SW, 5	SSW E SW	SSW, 8 E, 6 SW, 8	SW-WNW.
NORTH PACIFIC OCEAN A vessel	14 54 N. 12 30 N. 12 18 N. 19 48 N. 21 24 N. 21 24 N. 20 54 N. 15 12 N. 17 50 N. 122 29 N. 22 29 N. 23 18 N. 133 08 N. 33 16 48 N.	147 18 E. 134 36 E. 137 12 E. 136 18 E. 140 24 E. 107 00 W. 116 38 W. 124 19 W. 137 46 W. 144 36 W. 144 30 W. 145 24 W. 173 18 E. 163 18 E.	2 4 4 4 10 16 16 17 18 20 21 22 23 23 25	1a, 4	17 18 19 22 23 23 23	989. 5 993. 6 927. 9 989. 5 960. 1 1. 000. 7 1. 002. 4 1. 000. 5 1, 007. 1 995. 6 995. 6 1, 010. 8 998. 0 1, 011. 5	NW NE NE N NE N NE NE NE NE NE ESE S NE	SW, 12 SE, 8 SE, 9 W 8 WNW, 8 WSW, 8 E, 9 ENE, 8 E, 7 SE, 11 ENE, 9 E, 8 S, 7 SE, 8 S, 11	SSW SSE SSE SE SSE SSE SSE SSE SSE SSE S	SW, 12 SE, 8 S, 10 S, 12 SSE, 9 WSW, 9 E, 9 SE, 11 NNE, 9 ESE, 8 SE, 8 SE, 8 SE, 8 SE, 8 SE, 8 SE, 8	W-S. E-S. NE-S. NW-WSW. WNW-SW. W-SW. W-ESE. NE-ESE. NNE-ESE. NB-E. ESE-SW. SE-ESE. S-W. NNW-SSW.
LATE REPORT FOR JULY 1941											
A vessel	19 10 N.	132 12 W.	25	12p, 25	27	974. 6	N	N, 12	SSE	N, 12	N-NW.

¹ Position approximate.

WEATHER ON THE NORTH PACIFIC OCEAN By WILLIS E. HURD

Atmospheric pressure.—An unusual summer condition of pressure covered the Aleutian region in August 1941. The lack of the usual number of traveling depressions resulted in unwontedly high barometer averages at Dutch Harbor and St. Paul Island, so that hardly a remnant of the average Aleutian Low, normally persistent in summer, was observed. At St. Paul the mean pressure, 1,014.8 millibars (29.97 inches), was 6.3 millibars (0.14 inch) above the normal of the month. It was not until August 26 that pressure began definitely falling, and on the 27th the barometer at St. Paul reached a depth of 986 millibars (29.12 inches).

The Pacific anticyclone covered most northeastern Among the island groups from the eastern Hawaiians to the Philippines, pressures were below normal.

Table 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Pacific Ocean and its shores, August 1941

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
Barrow Dutch Harbor St. Paul Juneau Tatoosh Island San Francisco Mazatlan Honolulu Midway Island Guam Manila Hong Kong	Millibars 1, 016. 5 1, 016. 5 1, 014. 8 1, 017. 3 1, 015. 6 1, 010. 7 1, 014. 6 1, 07. 8 1, 007. 8 1, 006. 4 1, 004. 1	Millibars +4.3 +5.3 +6.3 -1.0 +1.4 +2.4 +0.2 -1.7 -2.8 -2.0 -0.7 -0.3	Millibars 1, 036 1, 035 1, 030 1, 026 1, 024 1, 022 1, 013 1, 018 1, 025 1, 010 1, 010	25 6 20 16 12 12 3, 20 15 2 22, 23 24, 26 31	Millibars 1, 002 993 986 1, 008 1, 009 1, 009 1, 008 1, 011 1, 009 1, 002 999 1, 002	11 27 27 27 31 26 24 23, 31 10, 15 8 13

¹ For 16 days.

Note.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observations.

Cyclones and gales.—No gale-producing extratropical

disturbances were reported.

Tropical cyclones of the Far East.—Subjoined is a report by the Reverend Bernard F. Doucette, S. J., Weather Bureau, Manila, P. I., on four typhoons and a depression over the Far East that occurred in August 1941. The first of the typhoons was that of the 1st to 14th, the center of which, according to press reports, passed close to the eastward of Guam on the 3d. The Pan American Airways at the island reported a wind velocity of 100 knots. At 1 a. m. of the 4th a vessel a short distance northeast of Guam experienced a southwest gale of hurricane force. As the storm went westward, a few ships experienced gales of forces 8 to 10 as far west as 132° E., in about 12° N., and as far west as 137° E., in 22° N., on the 5th. In the more northerly instance, with a south gale of force 10, an extraordinarily low barometer of 928 millibars (27.40 inches) was recorded by one ship. On the 6th, near 20° N. 136° E., a vessel reported a south wind of hurricane force, with barometer at 989.5 millibars (29.22 inches).

On the 11th a vessel encountered a southeasterly gale of force 9 near 21½° N. 140½° E., with lowest barometer 960.1 millibars (28.35 inches). This doubtless occurred in connection with the typhoon of the 6th to 18th, mentioned by Father Doucette. A further vessel experienced a west-southwest gale of force 9, with moderately depressed barometer near 21° N. 130° E. on the 16th, also prob-

ably within the field of the same typhoon.

Toward 6 p. m., local time, of the 24th, an east-bound ship near 35° N. 167° E., had a falling barometer, a light easterly wind, and a ground swell from the southwest. At 8 a. m. of the 25th a south wind of force 7 sprang up, increasing at noon to force 8, after which the vessel, in an attempt to avoid the storm, steered southeast. By 4 a. m., local time, of the 26th, near 33° N. 173° E., the south gale had increased to force 11, with barometer down to 998.1 millibars (29.47 inches). Later in the day, as the

cyclone moved apparently northeastward, the wind decreased, changing to southwest then west. Though this storm as observed was well out of the Tropics, there seems little doubt but that it was of tropical origin and therefore a true typhoon. No further report has yet been received of it, and no mention of it is made by Father Doucette.

of it, and no mention of it is made by Father Doucette.
On August 30, near 16° N. 163° E., a ship encountered a southwest gale of force 11 at 2 p. m., with a barometer of 988.2 millibars (29.18 inches). Another vessel, on September 1, had a southerly gale of force 11, with slightly lower barometer, near 17° N. 157° E. These observations appear to refer to the same typhoon. This tropical storm, like that of the 24th-25th, is not covered in the Manila report, and therefore the probability is that not four, but at least six typhoons must be counted in the record of the August typhoons in the Far East.

Tropical cyclone of the southeastern Pacific.—One highly

Tropical cyclone of the southeastern Pacific.—One highly interesting cyclone which attained to at least near hurricane intensity occurred between Mexico and the Hawaiian Islands. In the record of tropical cyclones of the southeastern North Pacific, covering the 32-year period 1910-41, it stands unique as the only one known to have gone northwestward into the region of the great high pressure area to the northeastward of the Hawaiian Islands. Almost as remarkable, too, is the fact that its course can be traced with good approximation from its probable beginning on the 16th with center near 12°-15° N., 107° W., to its final appearance as a mere depression on the 24th near 32° N. 150° W.

The vessel earliest observing the storm reported an east gale of force 9 and depressed barometer in 15° N., 107° W., on the afternoon of the 16th. On the 18th, near 19° N., 117° W., an observation gave an east-northeast gale of force 8, barometer 1,000.5 millibars (29.54 inches). On the 19th, near 19° N. 124° W., a force 9 gale was experienced early in the morning, with only slightly depressed barometer, and therefore well north of the storm center. On the 20th a west-bound steamer ran into northeasterly winds of force 10 near 21½° N. 135° W. at 4 p. m. A little to the westward, at 4 a. m. of the 21st, the wind had risen to northeast, force 11, barometer 29.44 inches, with high seas and continuous heavy rain. About noon, near 21½° N., 137° W., the wind changed to southeasterly, force 10, then rose to force 11, continuing until 8 p. m. or later, lowest barometer 993.6 millibars (29.34 inches), near 22½° N., 138° W. Strong to heavy southeasterly gales continued thereafter on the same ship until about noon of the 22d, in 24°38′ N. 139°57′ W. During the 23d the storm center gradually filled in, but until about 7 a. m. gales as high in force as 9 were experienced (in 29°25′ N. 144°30′ W.), while a local gale of force 8 was reported as late as 6 p. m. of the 23d, in 30° N. 145°24′ W.

Fog.—For the open Pacific, except for a few occurrences in the Gulf of Alaska and along the central Aleutians, reported fog was confined to a strip between about 39° and 45° N., 145° W. to 170° E. In the western part of the strip fog was general from the 17th to 19th; in the eastern part, from the 18th to 23d. Along the American coast, Swiftsure Bank lightship reported fog on 18 days. Off Oregon 4 days with fog were reported; off California, 13 days; and off Lower California, 7 days.

Note.—According to a late report, a tropical hurricane occurred on July 25-26, 1941, about midway between Mexico and the Hawaiian Islands. An east-bound ship entered the storm's influence near 19° N. 133° W., with falling barometer and northeast wind of force 7, on the afternoon of the 25th. About midnight she was in a full north hurricane, lowest barometer 97.46 millibars (28.78 inches), near 19° N. 132° W. At 12:20 a. m. of the 25th the wind fell to force 3 and then shifted to northwest, force 10. The wind continued of gale force until about 9 p. m. of the 25th.

TYPHOONS AND DEPRESSIONS OVER THE FAR EAST

BERNARD F. DOUCETTE, S. J.

[Weather Bureau, Manila, P. I.]

Depression, July 26-August 2, 1941.—A weak low-pressure area moved northwest from the ocean regions about 500 miles south-southeast of Guam to a position 200 miles north of Yap. It changed its course to the west, July 29, and seemed to have the intensity of a depression. A shift to the northwest took place July 31 when about 450 miles east of San Bernardino Strait. This brought the disturbance to the ocean regions east of Balintang Channel, where it disappeared August 3. There were no indications from available reports that this depression acquired any intensity during these days.

Typhoon, August 1-14, 1941.—There appeared to be a low-pressure area south of Guam on July 30 and 31, but there was no real pressure fall until August 1, when both Guam and Yap observations gave indications of the existence of a typhoon. This storm most likely formed over the eastern Caroline Islands, but from Guam and Yap observations it seemed to have come into existence about 300 or 400 miles southsoutheast of Guam. It moved north or north-northwest and passed close to and east of Guam during the afternoon hours of August 3. It then changed to the northwest, and moved quite rapidly along this course to the Nansei Islands and the Eastern Sea, where it inclined north. It crossed Korea, after a change to the east, and finally disappeared north of Japan, August 14 and 15, as far as available observations indicate.

On August 1 and 2, when the storm first manifested its existence to our stations, a consideration of pressure values from Guam and Yap would indicate that the storm center was directly south of Guam. Yet the steady, persistent northeast winds reported from the Commercial Pacific cable office, through the kindness of Mr. P. O'Connor, make one think that the storm was moving northwesterly toward the island. At any rate, it was not so